

## **ABSTRACT**

### **CONTEXT:**

Pharmacological agents are used to reduce perioperative blood loss

### **AIM OF THE STUDY:**

To know the effect of tranexamic acid in reducing perioperative blood loss.

### **SETTINGS AND DESIGN:**

A prospective randomised single blinded study was conducted in RGGGH Chennai.

### **METHOD:**

60 ASA-PS I and II patients undergoing lower limb orthopaedic surgeries were included in the prospective study. 30 patients were given tranexamic acid in a bolus dose of 10mg/kg 15minutes before surgical incision followed by continuous infusion of 1mg/kg/hr. The remaining 30 patients were allocated as a control group. Perioperative hemodynamics, perioperative blood loss, percentage fall of hemoglobin, need for transfusion were recorded.

### **RESULTS**

Mean volume of blood loss intraoperatively was  $513 \pm 83.7$  compared to  $685 \pm 121.1$  in placebo group. Mean volume of blood loss in the postoperative

period was  $60 \pm 13.7$  in tranexamic acid group compared to  $102.83 \pm 11.11$  in placebo group. Percentage of fall in the hemoglobin postoperatively was  $0.420 \pm .978$  in study group compared to  $0.930 \pm .566$  in the placebo group. The number of patients required blood transfusions were lower in the study group than in the placebo group (p value less than 0.01).

## **CONCLUSION**

We conclude that tranexamic acid significantly reduces perioperative blood loss and transfusion requirements during major lowerlimb orthopaedic surgeries.

## **Keywords:**

Tranexamic acid, blood loss, blood transfusion, suction drain, hemodynamics.